

Figure 1. NF-kB Nuclear Translocation in Immune Cells
 The data (above left) show cells imaged simultaneously in darkfield, green fluorescence, brightfield, and red fluorescence. The sample consisted of a monocytic cell line stained with an antibody against the NF-kB transcription factor (green) as well as a nuclear stain (red). Cells treated with lipo-polysaccharide (image rows 2-4) exhibit translocation of NF-kB from the cytoplasm to the nucleus while untreated cells lack NF-kB in the nuclear compartment (top row). A statistical analysis of imagery from 6616 cells quantitatively characterizes the degree of NF-kB nuclear translocation in the sample. Amnis' ImageStream platform is the only cell analysis technology that can perform this valuable assay on immune cells in suspension.

Fig. 1

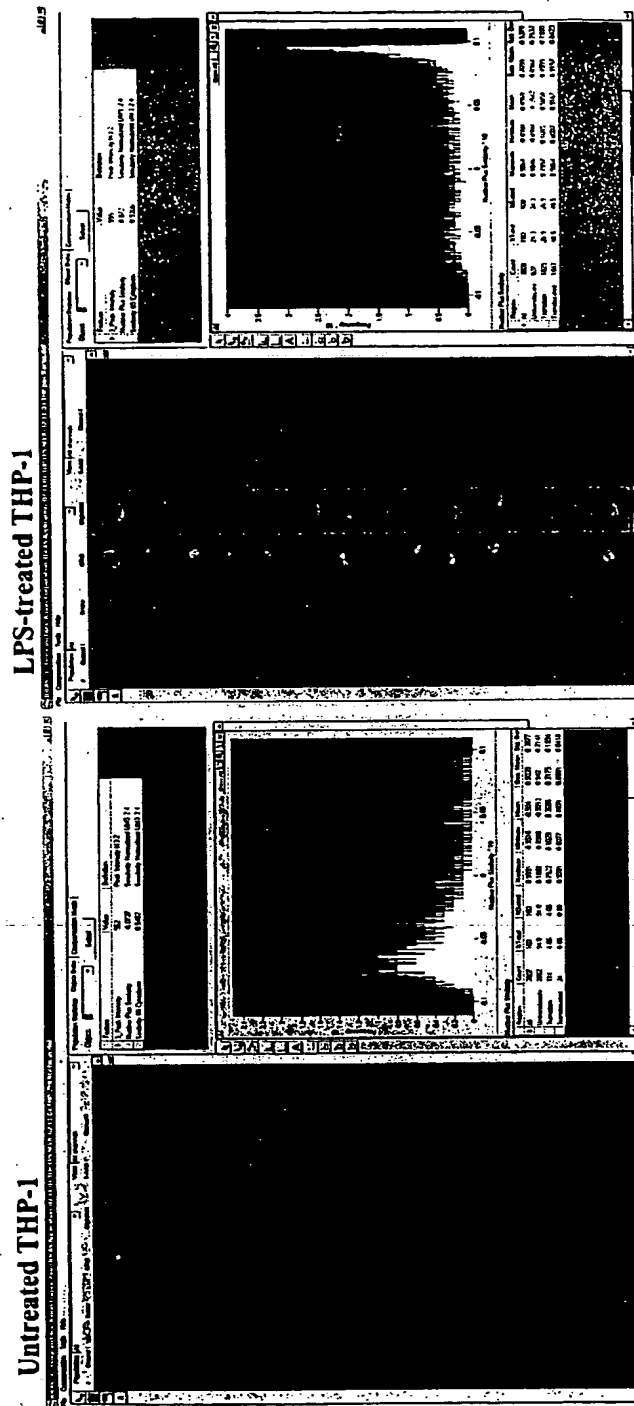


Fig. 2

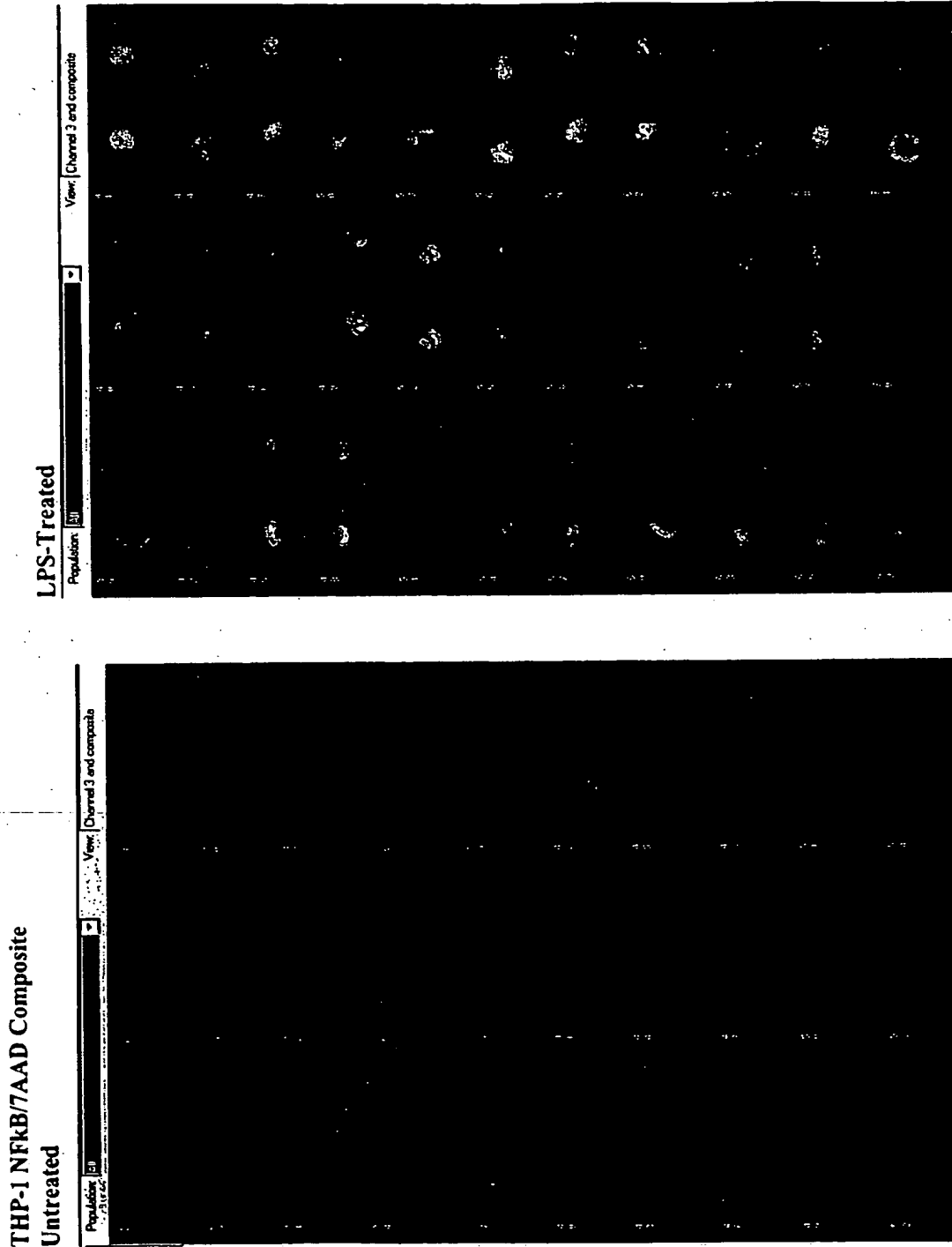
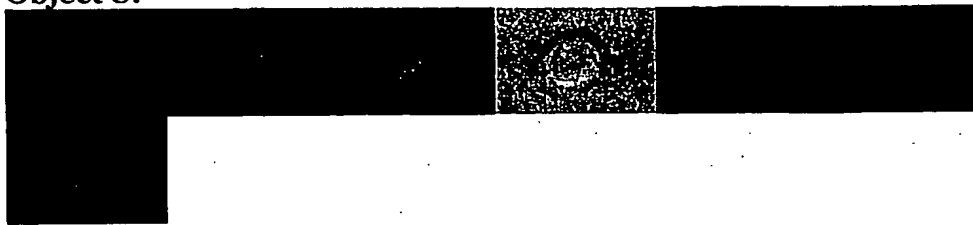


Fig. 3

Object 8:



7-AAD stain



MASKS:



85% UM3



75% UM5



Standard M5

NFκB stain



MASKS:



85% UM3

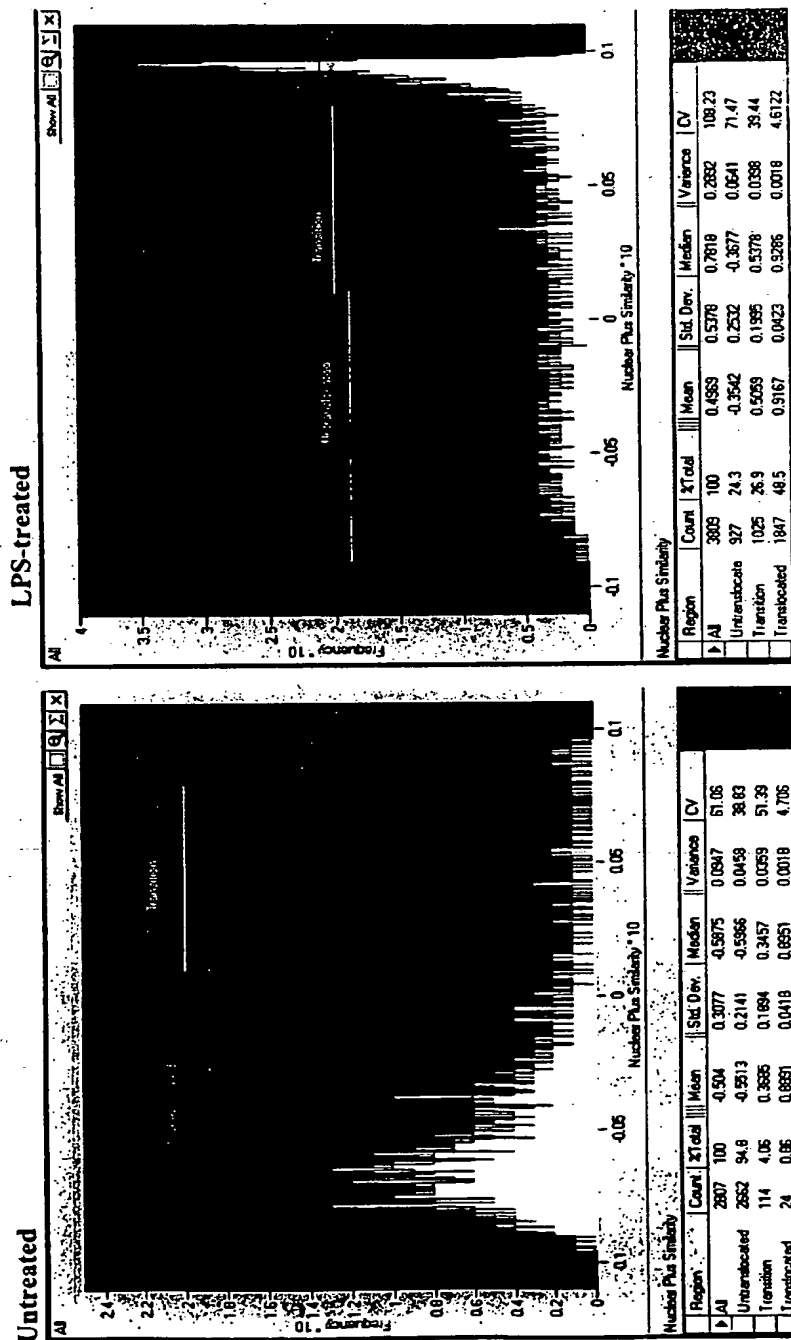


75% UM5

	Feature	Value	Definition
▶	3_Peak Intensity	571	Peak Intensity M3 2
	Nuclear Plus Similarity	-0.155	Similarity Normalized UM5 2 4
	Similarity 85 Cytoplasm	0.5003	Similarity Normalized UM3 2 4

Fig. 4

COMPARTMENTAL CORRELATION FEATURE:



Median Compartmental Correlation Feature:

Untranslocated = -0.5966 +/- 0.2141

Translocated = 0.9286 +/- 0.0423

Difference of 1.5252

Fig. 5

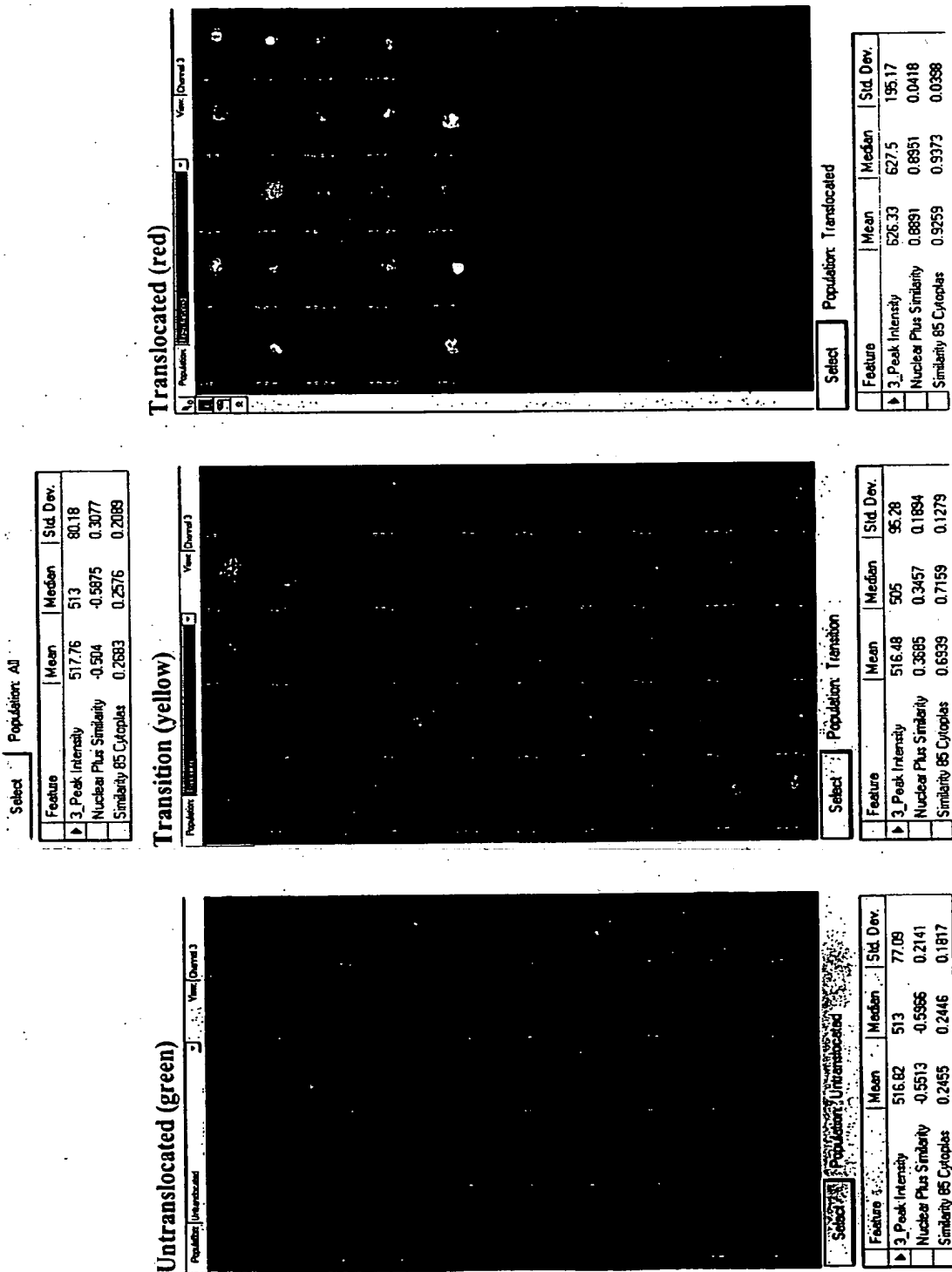


Fig. 6A

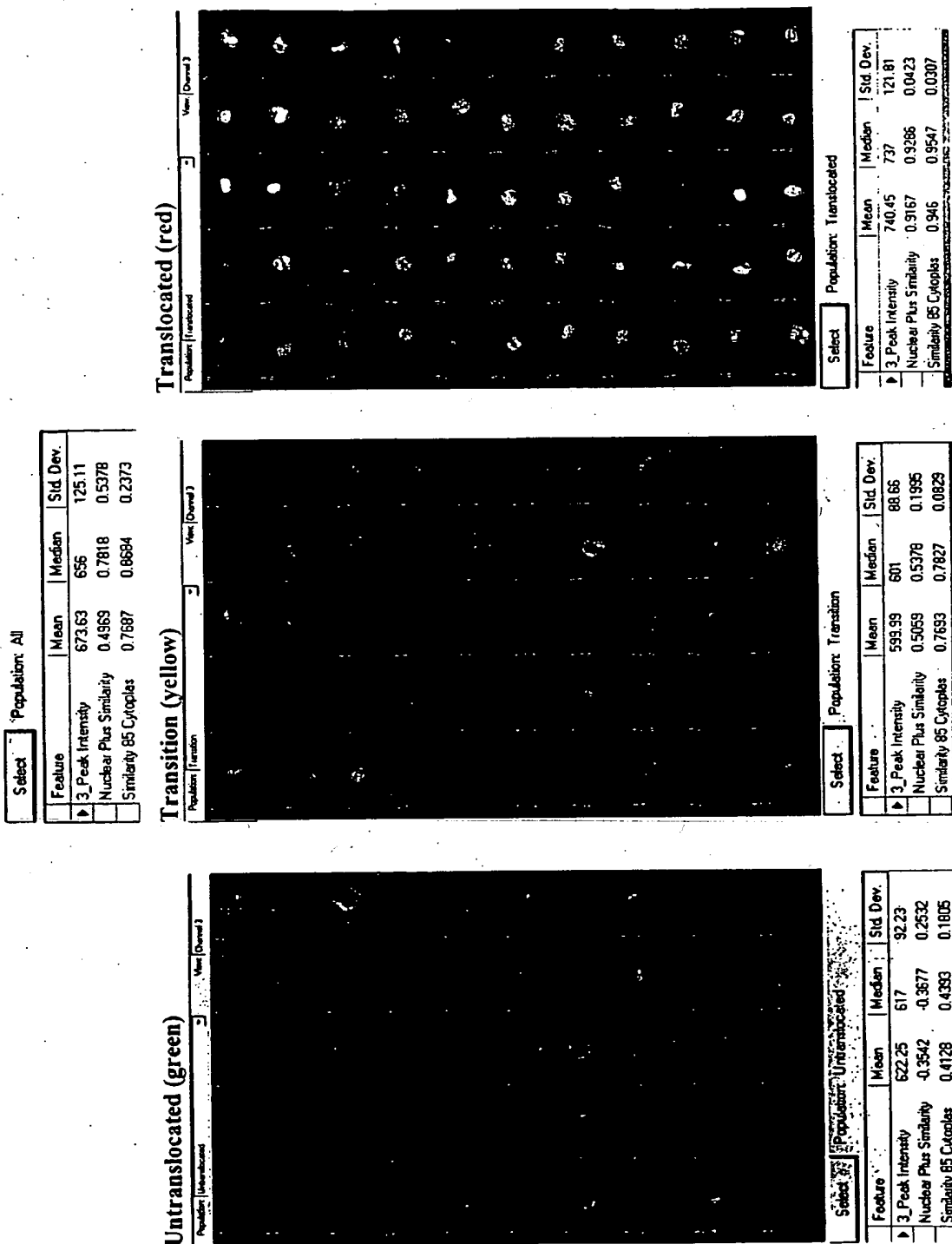


Fig. 6B

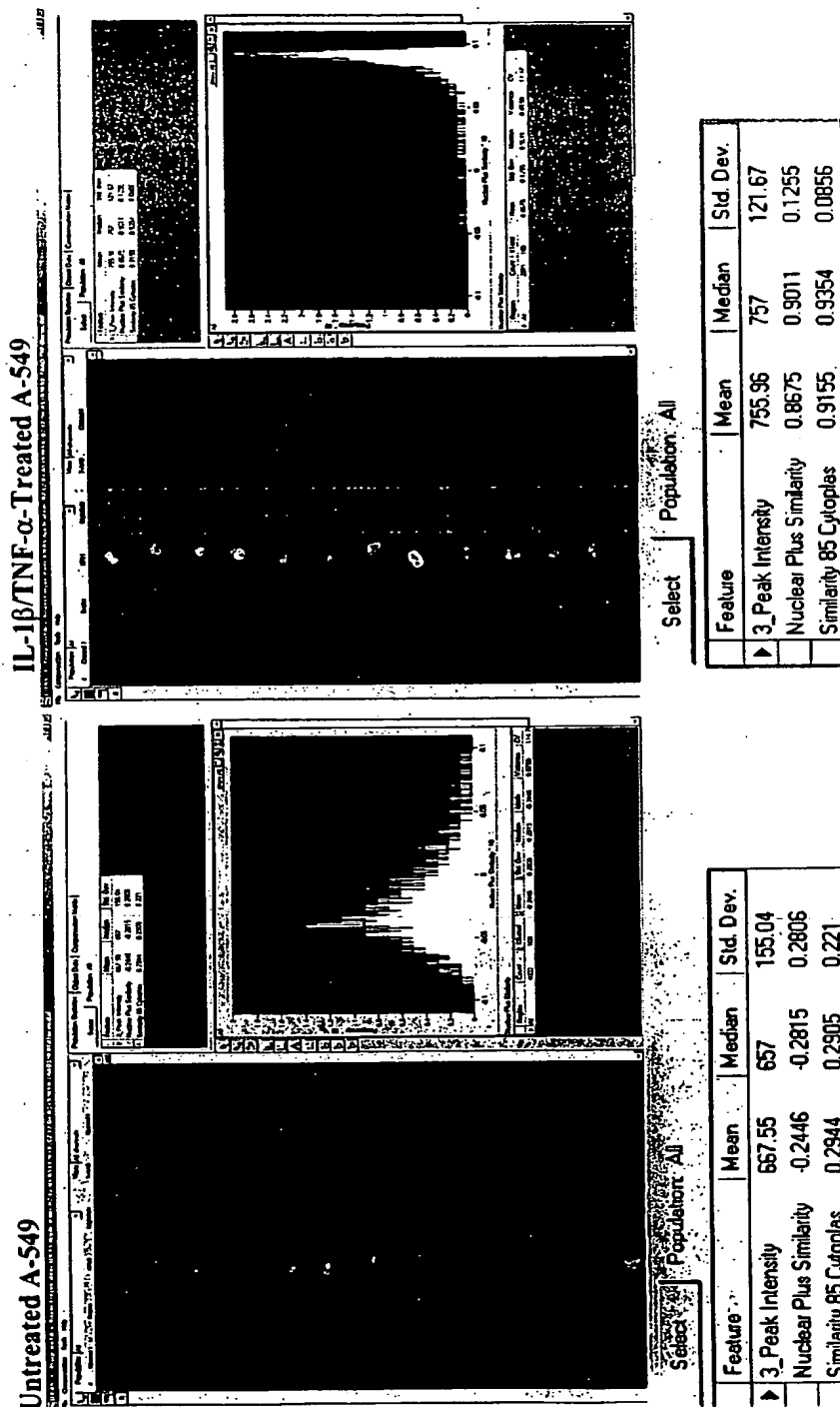


Fig. 7

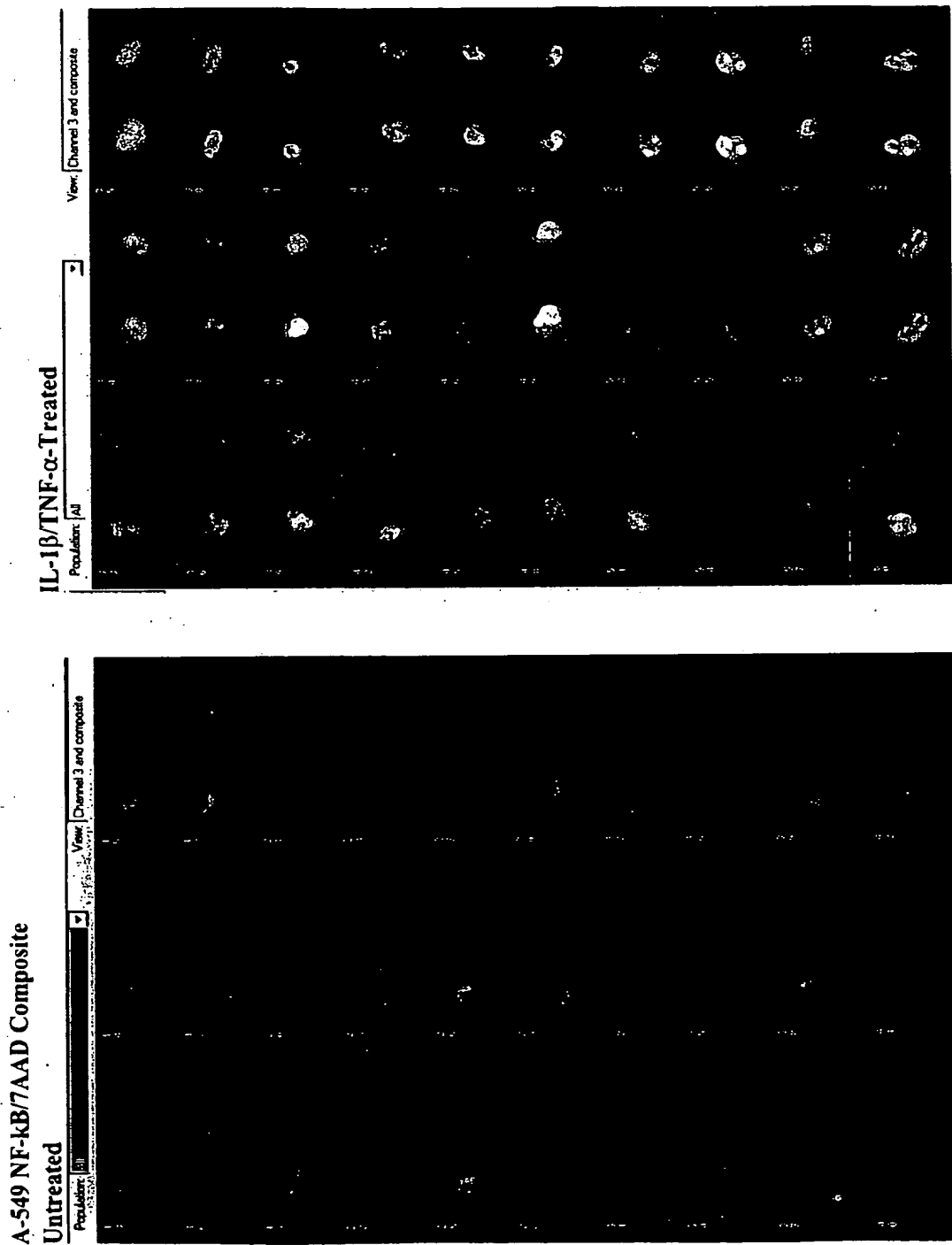
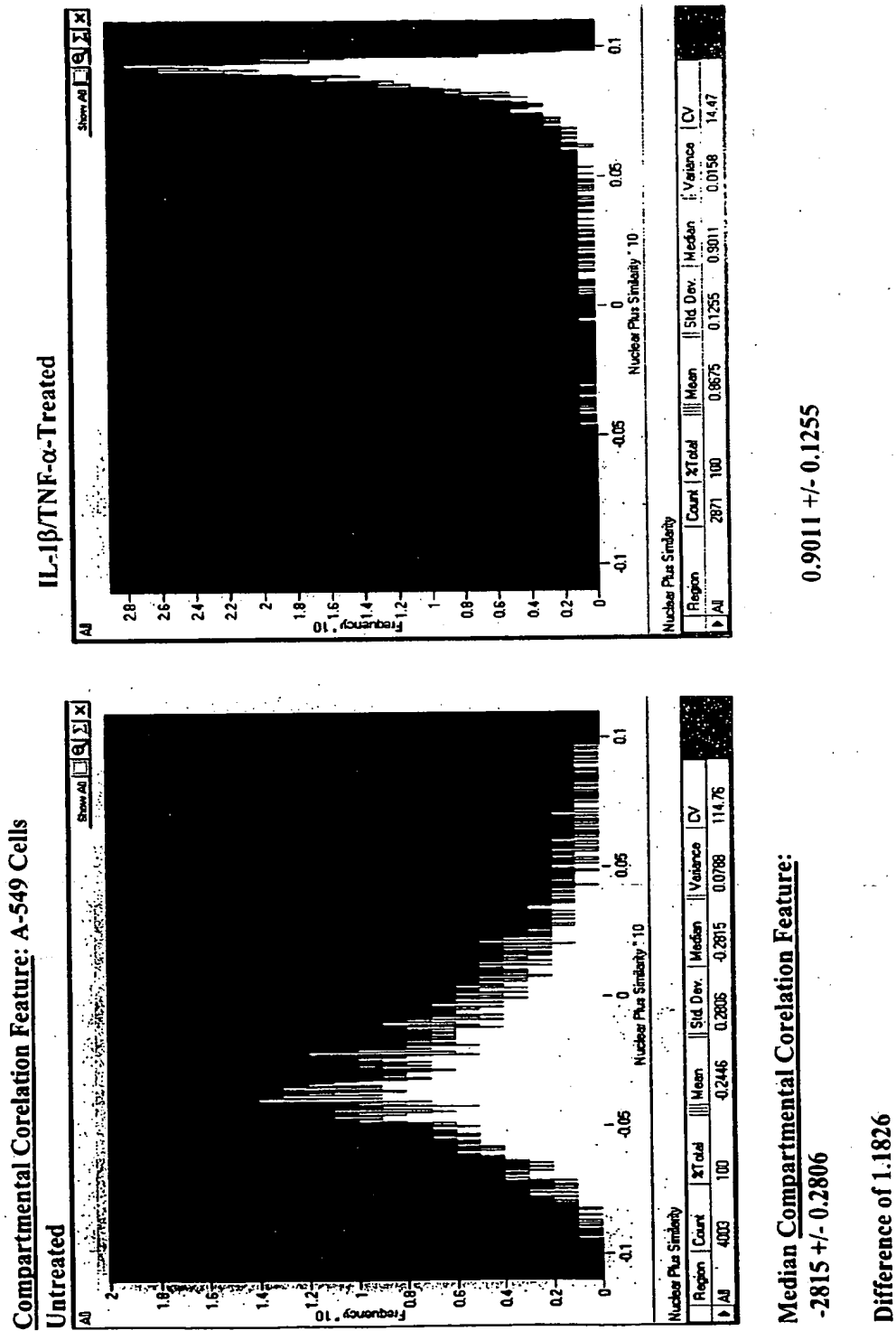


Fig. 8



IL-1 β /TNF- α -Treated

Nuclear Plus Similarity						
Region	Count	%Total	Mean	Std Dev.	Median	Variance
All	2871	100	0.9675	0.1255	0.9011	0.0158

Median Compartmental Correlation Feature:
 0.9011 +/- 0.1255

Fig. 9